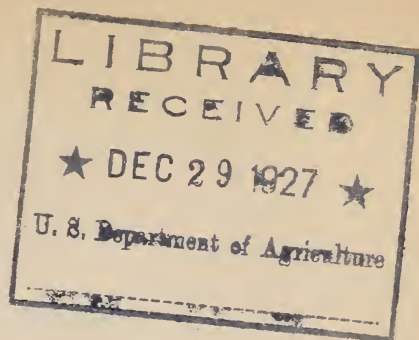


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## United States Department of Agriculture

FOOD, DRUG, AND INSECTICIDE ADMINISTRATION

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### SERVICE AND REGULATORY ANNOUNCEMENTS

Food and Drug No. 2

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## DEFINITIONS AND STANDARDS FOR FOOD PRODUCTS

(Superseding Office of the Secretary Circulars 13, 17, 19, and 136)

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### INTRODUCTION

The following definitions and standards for food products have been adopted as a guide for the officials of this department in enforcing the food and drugs act. These definitions and standards include those published in the form of food inspection decisions and those in Circular 136 which have not been superseded by such decisions.

W. M. JARDINE,  
*Secretary of Agriculture.*

WASHINGTON, D. C., *September 19, 1927.*

## **PRINCIPLES ON WHICH DEFINITIONS AND STANDARDS ARE BASED**

[The guiding considerations in preparing definitions and standards for food products are as follows:

The definitions are so framed as to exclude from the articles defined substances not included in the definitions.

A term defined in any of the several schedules has the same meaning wherever used.

The names of food products herein defined agree, so far as possible, with the existing American usage as known to the consumer.

The standards are such that a departure of the articles to which they apply, above the maximum or below the minimum limit prescribed, is evidence that such articles are of inferior or abnormal quality.

The limits fixed as standard are not necessarily the extremes authentically recorded for the article in question, because such extremes are commonly due to abnormal conditions of production and are usually accompanied by marks of inferiority or abnormality readily perceivable by the producer or manufacturer.]



## I. ANIMAL PRODUCTS

### A. MEATS AND THE PRINCIPAL MEAT PRODUCTS

#### a. MEATS

1. Flesh is any clean, sound, edible part of the striated muscle of an animal. The term "animal," as herein used, indicates a mammal, a fowl, a fish, a crustacean, a mollusk, or any other animal used as a source of food.

2. Meat<sup>1</sup> is the properly dressed flesh derived from cattle, from swine, from sheep, or from goats, sufficiently mature and in good health at the time of slaughter, but is restricted to that part of the striated muscle which is skeletal or that which is found in the tongue, in the diaphragm, in the heart, or in the esophagus, and does not include that found in the lips, in the snout, or in the ears; with or without the accompanying and overlying fat, and the portions of bone, skin, sinew, nerve, and blood vessels which normally accompany the flesh and which may not have been separated from it in the process of dressing it for sale.

3. Fresh meat is meat which has undergone no substantial change in character since the time of slaughter.

4. Beef is meat derived from cattle nearly 1 year of age, or older.

5. Veal is meat derived from young cattle 1 year or less of age.<sup>2</sup>

6. Mutton is meat derived from sheep nearly 1 year of age, or older.

7. Lamb is meat derived from young sheep 1 year or less of age.<sup>2</sup>

8. Pork is meat derived from swine.

9. Venison is flesh derived from deer.

#### b. MEAT BY-PRODUCTS

1. Meat by-products are any clean, sound, and properly dressed edible parts, other than meat, which have been derived from one or more carcasses of cattle, of swine, of sheep, or of goats, sufficiently mature and in good health at the time of slaughter.

#### c. PREPARED MEATS

1. Prepared meat is the clean, sound product obtained by subjecting meat to a process of comminuting, of drying, of curing, of smoking, of cooking, of seasoning, or of flavoring, or to any combination of such processes.

2. Cured meat is the clean, sound product obtained by subjecting meat to a process of salting, by the employment of dry common salt or of brine, with or without the use of one or more of the following: Sodium nitrite, sodium nitrate, potassium nitrate, sugar, a sirup, honey, spice.

3. Dry salt meat is the prepared meat which has been cured by the application of dry common salt, with or without the use of one or more of the following: Sodium nitrite, sodium nitrate, potassium nitrate, sugar, a sirup, honey, spice; with or without the injection into it of a solution of common salt to which may have been added one or more of the following: Sodium nitrite, sodium nitrate, potassium nitrate, sugar, a sirup, honey.

4. Corned meat is the prepared meat which has been cured by soaking in, with or without injecting into it, a solution of common salt, with or without one or more of the following, each in its proper proportion: Sodium nitrite, sodium nitrate, potassium nitrate, sugar, a sirup, honey, and with or without the use of spice.

5. Sweet pickled meat is the prepared meat which has been cured by soaking in, with or without injecting into it, a solution of common salt with sugar,

<sup>1</sup> The term "meat" when used in a qualified form, as, for example, "horse meat," "reindeer meat," "crab meat," etc., is then, and then only, properly applied to the corresponding portions of animals other than cattle, swine, sheep, and goats.

<sup>2</sup> Minimum limits governing the age or the weight or both of these have been fixed by certain States and municipalities in the case of calves and lambs to be slaughtered for meat.

a sirup, and/or honey, together with one or more of the following, each in its proper proportion: Sodium nitrite, sodium nitrate, potassium nitrate, and with or without the use of spice.

6. Dried meat is the clean, sound product obtained by subjecting fresh meat or cured meat to a process of drying, with or without the aid of artificial heat, until a substantial portion of the water has been removed.

7. Smoked meat is the clean, sound product obtained by subjecting fresh meat, dried meat, or cured meat to the direct action of the smoke either of burning wood or of similar burning material.

8. Canned meat is fresh meat or prepared meat, packed in hermetically sealed containers, with or without subsequent heating for the purpose of sterilization.

9. Hamburg steak, "Hamburger steak," is comminuted fresh beef, with or without the addition of suet and/or of seasoning.

10. Potted meat, deviled meat, is the clean, sound product obtained by comminuting and cooking fresh meat and/or prepared meat, with or without spice, and is usually packed in hermetically sealed containers.

11. Sausage meat is fresh meat or prepared meat, or a mixture of fresh meat and prepared meat, and is sometimes comminuted. The term "sausage meat" is sometimes applied to bulk sausage containing no meat by-products.

#### **d. MEAT FOOD PRODUCTS**

1. Meat food products are any articles of food or any articles that enter into the composition of food which are not prepared meats but which are derived or prepared, in whole or in part, by a process of manufacture from any portion of the carcasses of cattle, swine, sheep, or goats, if such manufactured portion be all, or a considerable and definite portion, of the article, except such preparations as are for medicinal purposes only.

2. Meat loaf is the product consisting of a mixture of comminuted meat with spice and/or with cereals, with or without milk and/or eggs, pressed into the form of a loaf and cooked.

3. Pork sausage is chopped or ground pork, with or without one or more of the following: Herbs, spice, common salt, sodium nitrite, sodium nitrate, potassium nitrate, sugar, a sirup, water, vinegar; and may be fresh, dried, smoked, or cooked.

4. Brawn is the product made from chopped or ground and cooked edible parts of swine, chiefly from the head, feet, and/or legs, with or without the chopped or ground tongue.

5. Headcheese, mock brawn, differs from brawn in that other meat and/or meat by-products are substituted, in whole or in part, for corresponding parts derived from swine.

6. Souse is the product consisting of meat and/or meat by-products; after cooking, the mixture is commonly packed into containers and covered with vinegar.

7. Scrapple is the product consisting of meat and/or meat by-products mixed with meal or the flour of grain, and cooked with seasoning materials, after which it is poured into a mold.

#### **e. LARD**

1. Lard is the rendered fresh fat from hogs in good health at the time of slaughter, is clean, free from rancidity, and contains, necessarily incorporated in the process of rendering, not more than 1 per cent of substances other than fatty acids and fat.

2. Leaf lard is lard rendered at moderately high temperatures from the internal fat of the abdomen of the hog, excluding that adherent to the intestines, and has an iodine number not greater than 60.

3. Neutral lard is lard rendered at low temperatures.

### **B. MILK AND MILK PRODUCTS**

#### **a. MILKS**

1. Milk is the whole, fresh, clean lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within 15 days before and 5 days after calving, or such longer period as may be necessary to render the milk practically colostrum free.



2. Pasteurized milk is milk that has been subjected to a temperature not lower than 145° F. for not less than 30 minutes, after which it is promptly cooled to 50° or lower.

3. Homogenized milk is milk that has been mechanically treated in such a manner as to alter its physical properties, with particular reference to the condition and appearance of the fat globules.

4. Skimmed milk is milk from which substantially all of the milk fat has been removed.

5. Buttermilk is the product that remains when fat is removed from milk or cream, sweet or sour, in the process of churning. It contains not less than 8.5 per cent of milk solids not fat.

6. Cultured buttermilk is the product obtained by souring pasteurized skimmed, or partially skimmed, milk by means of a suitable culture of lactic bacteria. It contains not less than 8.5 per cent of milk solids not fat.

7. Goat's milk, ewe's milk, etc., are the fresh, clean lacteal secretions, free from colostrum, obtained by the complete milking of healthy animals other than cows, properly fed and kept, and conform in name to the species of animal from which they are obtained.

8. Evaporated milk is the product resulting from the evaporation of a considerable portion of the water from milk, or from milk with adjustment, if necessary, of the ratio of fat to non-fat solids by the addition or by the abstraction of cream. It contains not less than 7.8 per cent of milk fat, nor less than 25.5 per cent of total milk solids; provided, however, that the sum of the percentages of milk fat and total milk solids be not less than 33.7.

9. Sweetened condensed milk is the product resulting from the evaporation of a considerable portion of the water from milk to which sugar (sucrose) has been added. It contains not less than 28 per cent of total milk solids, and not less than 8 per cent of milk fat.

10. Evaporated skimmed milk is the product resulting from the evaporation of a considerable portion of the water from skimmed milk, and contains not less than 20 per cent of milk solids.

11. Sweetened condensed skimmed milk is the product resulting from the evaporation of a considerable portion of the water from skimmed milk to which sugar (sucrose) has been added. It contains not less than 24 per cent of milk solids.

12. Dried milk is the product resulting from the removal of water from milk, and contains not less than 26 per cent of milk fat, and not more than 5 per cent of moisture.

13. Dried skimmed milk is the product resulting from the removal of water from skimmed milk, and contains not more than 5 per cent of moisture.

14. Malted milk is the product made by combining whole milk with the liquid separated from a mash of ground barley malt and wheat flour, with or without the addition of sodium chloride, sodium bicarbonate, and potassium bicarbonate, in such a manner as to secure the full enzymic action of the malt extract, and by removing water. The resulting product contains not less than 7.5 per cent of butterfat and not more than 3.5 per cent of moisture.

#### b. CREAM

1. Cream, sweet cream, is that portion of milk, rich in milk fat, which rises to the surface of milk on standing or is separated from it by centrifugal force. It is fresh and clean. It contains not less than 18 per cent of milk fat and not more than 0.2 per cent of acid-reacting substances, calculated in terms of lactic acid.

2. Whipping cream is cream which contains not less than 30 per cent of milk fat.

3. Homogenized cream is cream that has been mechanically treated in such a manner as to alter its physical properties, with particular reference to the condition and appearance of the fat globules.

4. Evaporated cream, clotted cream, is cream from which a considerable portion of water has been evaporated.

#### c. MILK FAT OR BUTTERFAT

1. Milk fat, butterfat, is the fat of milk.

#### d. BUTTER

1. By act of Congress approved March 4, 1923, butter was defined and the following standard provided for it: "That for the purposes of the food and

drugs act of June 30, 1906 (34th Statutes at Large, p. 768), 'butter' shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter, and containing not less than 80 per centum by weight of milk fat, all tolerances having been allowed for."

#### e. CHEESE

1. Cheese is the sound product made from curd obtained from the whole, partly skimmed, or skimmed milk of cows, or from the milk of other animals, with or without added cream, by coagulating the casein with rennet, lactic acid, or other suitable enzyme or acid, and with or without further treatment of the separated curd by heat or pressure, or by means of ripening ferments, special molds, or seasoning.

By act of Congress, approved June 6, 1896, cheese may also contain added coloring matter.

In the United States, the name "cheese," unqualified, is understood to mean Cheddar cheese, American cheese, American Cheddar cheese.

2. Whole milk cheese is cheese made from whole milk.

3. Partly skimmed milk cheese is cheese made from partly skimmed milk.

4. Skimmed milk cheese is cheese made from skimmed milk.

#### WHOLE MILK CHEESE

5. Cheddar cheese, American cheese, American Cheddar cheese, is the cheese made by the Cheddar process from heated and pressed curd obtained by the action of rennet on whole milk. It contains not more than 39 per cent of water, and, in the water-free substance, not less than 50 per cent of milk fat.

6. Stirred curd cheese, sweet curd cheese, is the cheese made by a modified Cheddar process from curd obtained by the action of rennet on whole milk. The special treatment of the curd, after the removal of the whey, yields a cheese of more open, granular texture than Cheddar cheese. It contains, in the water-free substance, not less than 50 per cent of milk fat.

7. Pineapple cheese is the cheese made by the pineapple Cheddar cheese process from pressed curd obtained by the action of rennet on whole milk. The curd is formed into a shape resembling a pineapple, with characteristic surface corrugations, and during the ripening period the cheese is thoroughly coated and rubbed with a suitable oil, with or without shellac. It contains, in the water-free substance, not less than 50 per cent of milk fat.

8. Limburger cheese is the cheese made by the Limburger process from unpressed curd obtained by the action of rennet on whole milk. The curd is ripened in a damp atmosphere by special fermentation. It contains, in the water-free substance, not less than 50 per cent of milk fat.

9. Brick cheese is the quick-ripened cheese made by the brick cheese process from pressed curd obtained by the action of rennet on whole milk. It contains, in the water-free substance, not less than 50 per cent of milk fat.

10. Stilton cheese is the cheese made by the Stilton process from unpressed curd obtained by the action of rennet on whole milk, with or without added cream. During the ripening process a special blue-green mold develops, and the cheese thus acquires a marbled or mottled appearance in section.

11. Gouda cheese is the cheese made by the Gouda process from heated and pressed curd obtained by the action of rennet on whole milk. The rind is colored with saffron. It contains, in the water-free substance, not less than 45 per cent of milk fat.

12. Neufchatel cheese is the cheese made by the Neufchatel process from unheated curd obtained by the combined action of lactic fermentation and rennet on whole milk. The curd, drained by gravity and light pressure, is kneaded or worked into a butter-like consistence and pressed into forms for immediate consumption or for ripening. It contains, in the water-free substance, not less than 50 per cent of milk fat.

13. Cream cheese is the unripened cheese made by the Neufchatel process from whole milk enriched with cream. It contains, in the water-free substance, not less than 65 per cent of milk fat.

14. Roquefort cheese is the cheese made by the Roquefort process from unheated unpressed curd obtained by the action of rennet on the whole milk of sheep, with or without the addition of a small proportion of the milk of goats. The curd is inoculated with a special mold (*Penicillium roqueforti*) and ripens with the growth of the mold. The fully ripened cheese is friable and has a mottled or marbled appearance in section.



15. Gorgonzola cheese is the cheese made by the Gorgonzola process from curd obtained by the action of rennet on whole milk. The cheese ripens in a cool, moist atmosphere with the development of a blue-green mold and thus acquires a mottled or marbled appearance in section.

#### WHOLE MILK OR PARTLY SKIMMED MILK CHEESE

16. Edam cheese is the cheese made by the Edam process from heated and pressed curd obtained by the action of rennet on whole milk or on partly skimmed milk. It is commonly made in spherical form and coated with a suitable oil and a harmless red coloring matter.

17. Emmenthaler cheese, Swiss cheese, is the cheese made by the Emmenthaler process from heated and pressed curd obtained by the action of rennet on whole milk or on partly skimmed milk, and is ripened by special gas-producing bacteria, causing characteristic "eyes" or holes. The cheese is also known in the United States as "Schweizer." It contains, in the water-free substance, not less than 45 per cent of milk fat.

18. Camembert cheese is the cheese made by the Camembert process from unheated unpressed curd obtained by the action of rennet on whole milk or on slightly skimmed milk, and ripens with the growth of a special mold (*Penicillium camemberti*) on the outer surface. It contains, in the water-free substance, not less than 45 per cent of milk fat.

19. Brie cheese is the cheese made by the Brie process from unheated unpressed curd obtained by the action of rennet on whole milk, on milk with added cream, or on slightly skimmed milk, and ripens with the growth of a special mold on the outer surface.

20. Parmesan cheese is the cheese made by the Parmesan process from heated and hard-pressed curd obtained by the action of rennet on partly skimmed milk. The cheese, during the long ripening process, is coated with a suitable oil.

#### SKIMMED MILK CHEESE

21. Cottage cheese, Schmierkase, is the unripened cheese made from unheated (or scalded) curd obtained by the action of lactic fermentation or lactic acid or rennet, or by any combination of these agents, on skimmed milk, with or without the addition of buttermilk. The drained curd is sometimes mixed with cream, salted, and sometimes otherwise seasoned.

#### WHEY CHEESE

22. Whey cheese (so-called) is produced by various processes from the constituents of whey. There are a number of varieties, each of which bears a distinctive name, according to the nature of the process by which it has been produced, as, for example, "Ricotta," "Zieger," "Primost," "Mysost."

#### f. ICE CREAM

1. Ice cream is a frozen product made from cream and sugar, with or without a natural flavoring, and contains not less than 14 per cent of milk fat.

2. Fruit ice cream is a frozen product made from cream, sugar, and sound, clean, mature fruits, and contains not less than 12 per cent of milk fat.

3. Nut ice cream is a frozen product made from cream, sugar, and sound, nonrancid nuts, and contains not less than 12 per cent of milk fat.

#### g. MISCELLANEOUS MILK PRODUCTS

1. Whey is the product remaining after the removal of fat and casein from milk in the process of cheese making.

## II. VEGETABLE PRODUCTS

### A. GRAIN PRODUCTS

#### a. GRAINS AND MEALS

1. Grain is the fully matured, clean, sound, air-dry seed of wheat, maize, rice, oats, rye, buckwheat, barley, sorghum, millet, or spelt.

2. Rice is the hulled, or hulled and polished, grain of *Oryza sativa* L.

(a) Brown rice is the hulled, unpolished grain.

- (b) Polished rice, "rice," is the hulled grain from which the bran or pericarp has been removed by scouring and rubbing.
3. Meal is the clean, sound product made by grinding grain.
4. Graham flour is unbolted wheat meal.
5. Maize meal, corn meal, Indian corn meal, is meal made from sound maize grain, and contains not more than 14 per cent of moisture, not less than 1.12 per cent of nitrogen, and not more than 1.6 per cent of ash.
6. Oatmeal is meal made from hulled oats, and contains not more than 12 per cent of moisture, not more than 1.5 per cent of crude fiber, not less than 2.24 per cent of nitrogen, and not more than 2.2 per cent of ash.
7. Flour is the fine, clean, sound product made by bolting wheat meal. It contains not more than 15 per cent of moisture,<sup>3</sup> not less than 1.25 per cent of nitrogen, not more than 1 per cent of ash, and not more than 0.5 per cent of fiber.
8. Gluten flour is the clean, sound product made from wheat flour by the removal of a large part of the starch, and contains not more than 10 per cent of moisture, and, calculated on the water-free basis, not less than 7.1 per cent of nitrogen, not more than 56 per cent of nitrogen-free extract (using the protein factor 5.7), and not more than 44 per cent of starch (as determined by the diastase method).
9. Ground gluten is the clean, sound product made from wheat flour by the almost complete removal of starch, and contains not more than 10 per cent of moisture, and, calculated on the water-free basis, not less than 14.2 per cent of nitrogen, not more than 15 per cent of nitrogen-free extract (using the protein factor 5.7), and not more than 5.5 per cent of starch (as determined by the diastase method).
10. Buckwheat flour is bolted buckwheat meal, and contains not more than 12 per cent of moisture, not less than 1.28 per cent of nitrogen, and not more than 1.75 per cent of ash.
11. Rye flour is the fine, clean, sound product made by bolting rye meal, and contains not more than 13.5 per cent of moisture, not less than 1.36 per cent of nitrogen, and not more than 1.25 per cent of ash.

#### b. BREADS

1. Bread is the sound product made by baking a dough consisting of a leavened or unleavened mixture of ground grain and/or other clean, sound, edible farinaceous substance, with potable water, and with or without the addition of other edible substances. In the United States the name "bread," unqualified, is understood to mean wheat bread, white bread.
2. Wheat bread dough, white bread dough, is the dough consisting of a leavened and kneaded mixture of flour, potable water, edible fat or oil, sugar and/or other fermentable carbohydrate substance, salt, and yeast, with or without the addition of milk or a milk product, of diastatic and/or proteolytic ferments, and of such limited amounts of unobjectionable salts as serve solely as yeast nutrients,<sup>4</sup> and with or without the replacement of not more than 3 per cent of the flour ingredient by some other edible farinaceous substance.
3. Wheat bread, white bread, is the bread obtained by baking wheat bread dough in the form of a loaf or of rolls or other units smaller than a loaf. It contains, one hour or more after baking, not more than 38 per cent of moisture, as determined upon the entire loaf or other unit.
4. Milk bread is the bread obtained by baking a wheat bread dough in which not less than one-third of the water ingredient has been replaced by milk or the constituents of milk solids in proportions normal for whole milk. It conforms to the moisture limitation for wheat bread.
5. Rye bread is the bread obtained by baking a dough which differs from wheat bread dough in that not less than one-third of the flour ingredient has been replaced by rye flour. It conforms to the moisture limitation for wheat bread.
6. Raisin bread is the bread obtained by baking wheat bread dough, to which have been added sound raisins in quantity equivalent to at least 3 ounces for each pound of the baked product and which may contain proportions of sweet-

<sup>3</sup> By "moisture" is meant the loss in weight resulting from drying in accordance with the vacuum method of the Association of Official Agricultural Chemists. The moisture limit of 15 per cent, thus determined, is regarded as equivalent to the former moisture limit of 13.5 per cent, as determined by the water-oven method.

<sup>4</sup> The propriety of the use of minute quantities of oxidizing agents as enzyme activators is reserved for future consideration and without prejudice.



ening and shortening ingredients greater than those commonly used in wheat bread dough.

7. Brown bread, Boston brown bread, is a bread made from rye and corn meals, with or without flour, whole-wheat flour, and/or rye flour, with molasses, and in which chemical leavening agents, with or without sour milk, are commonly used instead of yeast. In some localities the name "brown bread" is used to designate a bread obtained by baking a dough which differs from wheat bread dough in that a portion of the flour ingredient has been replaced by whole-wheat flour.

### c. ALIMENTARY PASTES

1. Alimentary pastes are the shaped and dried doughs prepared from semolina, from farina, from wheat flour, or from a mixture of any two or of all of these, with or without salt, and with one or more of the following: Water, egg, egg yolk, milk, a milk product. An alimentary paste contains not more than 13 per cent of moisture, as determined by the vacuum method.

2. Plain alimentary pastes are alimentary pastes made without egg or egg yolk, or so made that the content of the solids of egg and/or of egg yolk is, upon a moisture-free basis, less than 5.5 per cent by weight.

3. Egg alimentary pastes are alimentary pastes which contain, upon a moisture-free basis, not less than 5.5 per cent by weight of the solids of egg and/or of egg yolk.

4. Noodles, egg noodles, are a form of egg alimentary paste which, in the course of its preparation, has been rolled or pressed into sheets or ribbons, with or without subsequent cutting or shaping.

5. Water noodles are a form of plain alimentary paste which, in the course of its preparation, has been rolled or pressed into sheets or ribbons, with or without subsequent cutting or shaping.

6. Macaroni, spaghetti, vermicelli, are plain alimentary pastes, distinguished by their characteristic shapes.

7. Semolina macaroni, semolina spaghetti, semolina vermicelli, are plain alimentary pastes in the preparation of which semolina is the only farinaceous ingredient used, and are distinguished by their characteristic shapes.

## B. FRUIT AND VEGETABLES

### a. FRUIT AND FRUIT PRODUCTS

(Except fruit juices, fresh, sweet, and fermented, and vinegars)

1. Fruit is the clean, sound, edible, fleshy fructification of a plant and is characterized by its sweet, acid, and/or ethereal flavor.

2. Fresh fruit is fruit which has undergone no material change other than ripening since the time of gathering.

3. Citrus fruits:

(a) Grapefruit, pomelo, is the sound, mature fruit of *Citrus grandis* Osbeck. The juice of the mature fruit contains not less than 7 parts of soluble solids to each part of acid calculated as citric acid without water of crystallization.

(b) Orange (common, sweet, or round) is the sound, mature fruit of *C. sinensis* Osbeck. The juice of the mature fruit contains not less than 8 parts of soluble solids to each part of acid calculated as citric acid without water of crystallization.

4. Dried fruit is the clean, sound product resulting from the evaporation of the greater portion of the water from properly prepared fresh fruit.

(a) The term "sundried" is commonly used to designate the product dried without the use of artificial heat.

(b) The terms "evaporated" and "dehydrated" are commonly used to designate the product dried by the use of artificial heat.

5. Evaporated apples are evaporated fruit made from peeled, cored, and sliced apples, and contain not more than 24 per cent of moisture, as determined by the official method of the Association of Official Agricultural Chemists.

6. Cold-pack fruit is the clean, sound product obtained by packing, in a suitable container, properly prepared fresh fruit, with or without the addition of sugar (sucrose), and maintaining it at a temperature sufficiently low to insure its preservation.



7. Canned fruit is the clean, sound product made from properly prepared fresh fruit, with or without water and/or sugar (sucrose),

(a) By processing in a suitable, hermetically sealed container, or

(b) By heating and packing in a suitable container which is then hermetically sealed.

8. Preserve, fruit preserve, jam, fruit jam, is the clean, sound product made by cooking to a suitable consistence properly prepared fresh fruit, cold-pack fruit, canned fruit, or a mixture of two or of all of these, with sugar (sucrose) or with sugar and water. In its preparation not less than 45 pounds of fruit are used to each 55 pounds of sugar (sucrose). A product in which the fruit is whole or in relatively large pieces is customarily designated a "preserve" rather than a "jam."

9. Glucose fruit preserve, corn sirup fruit preserve, glucose fruit jam, corn sirup fruit jam, is the clean, sound product made by cooking to a suitable consistence properly prepared fresh fruit, cold-pack fruit, canned fruit, or a mixture of two or of all of these, with glucose or corn sirup. In its preparation not less than 45 pounds of fruit are used to each 55 pounds of glucose or corn sirup.

10. Fruit butter is the sound product made from fruit juice and clean, sound, properly matured and prepared fruit, evaporated to a semisolid mass of homogeneous consistence, with or without the addition of sugar and spices or vinegar, and conforms in name to the fruit used in its preparation.

11. Glucose fruit butter, corn sirup fruit butter, is a fruit butter in which glucose, or corn sirup, is used in place of sugar (sucrose).

12. Jelly, fruit jelly, is the clean, sound, semisolid, gelatinous product made by concentrating to a suitable consistence the strained juice, or the strained water extract, from fresh fruit, from cold-pack fruit, from canned fruit, or from a mixture of two or of all of these, with sugar (sucrose).

13. Glucose fruit jelly, corn sirup fruit jelly, is the clean, sound, semisolid, gelatinous product made by concentrating to a suitable consistence the strained juice, or the strained water extract, from fresh fruit, from cold-pack fruit, from canned fruit, or from a mixture of two or of all of these, with glucose or corn sirup.

14. Citrus fruit marmalade is the clean, sound, jelly-like product made from the properly prepared juice and peel, with or without the pulp, of fresh citrus fruit, of canned citrus fruit, or of a mixture of these, by cooking with water and sugar (sucrose). It contains, embedded in the mass, pieces of the fruit peel, with or without portions of the pulp of the fruit.

#### **b. NUT AND FRUIT KERNEL PRODUCTS**

1. Almond paste is the plastic product obtained by cooking blanched and ground sweet almonds with blanched and ground bitter almonds, sugar, and water. It contains not more than 14 per cent of water nor more than 40 per cent of total sugars expressed as invert sugar.

2. Kernel pastes are the plastic products obtained by cooking, with sugar and water, the blanched and ground kernels of one or more of the following: Apricots, peaches, plums (prunes). They are free from hydrocyanic acid and contain not more than 14 per cent of water, nor more than 40 per cent of total sugars expressed as invert sugar. A kernel paste conforms in name to the kind or kinds of kernels employed in its production.

#### **c. VEGETABLES AND VEGETABLE PRODUCTS**

1. Vegetables are the succulent, clean, sound, edible parts of herbaceous plants used for culinary purposes.

2. Dried vegetables are the clean, sound products made by drying properly matured and prepared vegetables in such a way as to take up no harmful substance, and conform in name to the vegetables used in their preparation; sun-dried vegetables are dried vegetables made by drying without the use of artificial means; evaporated vegetables are dried vegetables made by drying with the use of artificial means.

3. Canned vegetables are properly matured and prepared fresh vegetables, with or without the addition of potable water, salt, and sugar, as specified in the separate definitions for the several kinds of canned vegetables, sterilized by heat, with or without previous cooking, in vessels from which they take up no injurious substance, and kept in suitable, clean, hermetically sealed containers.

4. Canned peas are the canned vegetables prepared from the well developed but still tender seeds of the common or garden pea (*Pisum sativum*) by shell-

ing, winnowing, and thorough washing, with or without grading and with or without precooking (blanching), and by the addition, before sterilization, of the necessary amount of potable water, with or without sugar and salt.

*Canned pea varieties:*

Early peas are peas of early maturing sorts having a smooth skin.

Sugar peas, sweet peas, are peas of later maturing varieties having a wrinkled skin and sweet flavor.

*Canned pea sizes:*

No. 1 peas are peas which were, before precooking (blanching), small enough to pass through a screen of 9/32-inch (7 mm.) mesh.

No. 2 peas are peas which were, before precooking (blanching), small enough to pass through a screen of 10/32-inch (8 mm.) mesh.

No. 3 peas are peas which were, before precooking (blanching), small enough to pass through a screen of 11/32-inch (8.7 mm.) mesh.

No. 4 peas are peas which were, before precooking (blanching), small enough to pass through a screen of 12/32-inch (9.5 mm.) mesh.

No. 5 peas are peas which were, before precooking (blanching), small enough to pass through a screen of 13/32-inch (10.3 mm.) mesh.

No. 6 peas are peas not all of which were, before precooking (blanching), small enough to pass through a screen of 13/32-inch (10.3 mm.) mesh.

5. Pickles are clean, sound, immature cucumbers, properly prepared, without taking up any metallic compound other than salt, and preserved in any kind of vinegar, with or without spices; pickled onions, pickled beets, pickled beans, and other pickled vegetables are vegetables prepared as described above, and conform in name to the vegetables used.

6. Salt pickles are clean, sound, immature cucumbers, preserved in a solution of common salt, with or without spices.

7. Sweet pickles are pickled cucumbers or other vegetables in the preparation of which sugar (sucrose) is used.

8. Sauerkraut is the clean, sound product, of characteristic acid flavor, obtained by the full fermentation, chiefly lactic, of properly prepared and shredded cabbage in the presence of not less than 2 per cent nor more than 3 per cent of salt. It contains, upon completion of the fermentation, not less than 1.5 per cent of acid, expressed as lactic acid. Sauerkraut which has been rebrined in the process of canning or repacking contains not less than 1 per cent of acid, expressed as lactic acid.

9. Catchup (ketchup, catsup) is the clean, sound product made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes, with spices and with or without sugar and vinegar; mushroom catchup, walnut catchup, etc., are catchups made as above described, and conform in name to the substances used in their preparation.

## C. SUGARS AND RELATED SUBSTANCES

### a. SUGAR AND SUGAR PRODUCTS

#### SUGARS

1. Sugar is the product chemically known as sucrose (saccharose), chiefly obtained from sugar cane, sugar beets, sorghum, maple, and palm.

2. Granulated, loaf, cut, milled, and powdered sugars are different forms of sugar, and contain at least 99.5 per cent of sucrose.

3. Maple sugar, maple concrete, is the solid product resulting from the evaporation of maple sap or maple sirup.

4. Massequite, melada, mush sugar, and concrete are products made by evaporating the purified juice of a sugar-producing plant, or a solution of sugar, to a solid or semisolid consistence, and in which the sugar chiefly exists in a crystalline state.

#### MOLASSES AND REFINERS' SIRUP

5. Molasses is the product left after separating the sugar from massequite, melada, mush sugar, or concrete, and contains not more than 25 per cent of water and not more than 5 per cent of ash.

6. Refiners' sirup, treacle, is the residual liquid product obtained in the process of refining raw sugars, and contains not more than 25 per cent of water and not more than 8 per cent of ash.



## SIRUPS

7. Sirup is the sound product made by purifying and evaporating the juice of a sugar-producing plant without removing any of the sugar.

8. Sugar-cane sirup is sirup made by the evaporation of the juice of the sugar-cane or by the solution of sugar-cane concrete, and contains not more than 30 per cent of water and not more than 2.5 per cent of ash.

9. Sorghum sirup is sirup made by the evaporation of sorghum juice or by the solution of sorghum concrete, and contains not more than 30 per cent of water and not more than 2.5 per cent of ash.

10. Maple sirup is sirup made by the evaporation of maple sap or by the solution of maple concrete, and contains not more than 35 per cent of water, and weighs not less than 11 pounds to the gallon (231 cubic inches).

11. Sugar sirup is the product made by dissolving sugar to the consistence of a sirup, and contains not more than 35 per cent of water.

## b. GLUCOSE PRODUCTS

1. Starch sugar is the solid product made by hydrolyzing starch or a starch-containing substance until the greater part of the starch is converted into dextrose. Starch sugar appears in commerce in two forms, anhydrous starch sugar and hydrous starch sugar. The former, crystallized without water of crystallization, contains not less than 95 per cent of dextrose and not more than 0.8 per cent of ash. The latter, crystallized with water of crystallization, is of two varieties: 70 sugar, also known as brewers' sugar, contains not less than 70 per cent of dextrose and not more than 0.8 per cent of ash; 80 sugar, climax or acme sugar, contains not less than 80 per cent of dextrose and not more than 1.5 per cent of ash. The ash of all these products consists almost entirely of chlorides and sulphates.

2. Glucose, mixing glucose, confectioner's glucose, is a thick, sirupy, colorless product made by incompletely hydrolyzing starch, or a starch-containing substance, and decolorizing and evaporating the product. It contains on a basis of 41° Baumé not more than 1 per cent of ash, consisting chiefly of chlorides and sulphates.

## c. CANDY

1. Candy is a product made from a saccharine substance or substances, with or without the addition of harmless coloring, flavoring, or filling materials, and contains no terra alba, barytes, talc, chrome yellow, or other mineral substances, or poisonous colors or flavors, or other ingredients deleterious or detrimental to health, or any vinous, malt, or spirituous liquor or compound, or narcotic drug.

## d. HONEY

1. Honey is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb by honey bees (*Aphis mellifica* and *A. dorsata*), is levorotatory, and contains not more than 25 per cent of water, not more than 0.25 per cent of ash, and not more than 8 per cent of sucrose.

2. Comb honey is honey contained in the cells of comb.

3. Extracted honey is honey which has been separated from the uncrushed comb by centrifugal force or gravity.

4. Strained honey is honey removed from the crushed comb by straining or other means.

## D. CONDIMENTS (OTHER THAN WINES, VINEGARS, AND SALT)

## a. SPICES

The term "dried" as used in this schedule refers to the air-dried product. The term "starch" as used in this schedule refers to starch as determined by the official diastase method. In the examination of the products listed in this schedule the methods of analysis of the Association of Official Agricultural Chemists should be followed, except where otherwise specified.

1. Spices are aromatic vegetable substances used for the seasoning of food. They are clean, sound, and true to name, and from them no portion of any volatile oil or other flavoring principle has been removed.

2. Allspice, pimento, is the dried, nearly ripe fruit of *Pimenta officinalis* Lindl. It contains not less than 8 per cent of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than 25



per cent of crude fiber, not more than 6 per cent of total ash, nor more than 0.4 per cent of ash insoluble in hydrochloric acid.

3. Anise, aniseed, is the dried fruit of *Pimpinella anisum* L. It contains not more than 9 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

4. Bay leaves are the dried leaves of *Laurus nobilis* L.

5. Capers are the flower buds of *Capparis spinosa* L.

6. Caraway, caraway seed, is the dried fruit of *Carum carvi* L. It contains not more than 8 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

7. Cardamom is the dried, nearly ripe fruit of *Elettaria cardamomum* Maton.

8. Cardamom seed is the dried seed of cardamom. It contains not more than 8 per cent of total ash, nor more than 3 per cent of ash insoluble in hydrochloric acid.

9. Red pepper is the red, dried, ripe fruit of any species of *Capsicum*. It contains not more than 8 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid.

10. Cayenne pepper, Cayenne, is the dried, ripe fruit of *Capsicum frutescens* L., *C. baccatum* L., or some other small-fruited species of *Capsicum*. It contains not less than 15 per cent of nonvolatile ether extract, not more than 1.5 per cent of starch, not more than 28 per cent of crude fiber, not more than 8 per cent of total ash, nor more than 1.25 per cent of ash insoluble in hydrochloric acid.

11. Paprika is the dried, ripe fruit of *Capsicum annuum* L. It contains not more than 8.5 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid. The iodine number of its extracted oil is not less than 125, nor more than 136.

12. Hungarian paprika is paprika having the pungency and flavor characteristic of that grown in Hungary.

(a) Rosenpaprika, rosapaprika, rose paprika, is Hungarian paprika prepared by grinding specially selected pods of paprika, from which the placenta, stalks, and stems have been removed. It contains not more seeds than the normal pods, not more than 18 per cent of nonvolatile ether extract, not more than 23 per cent of crude fiber, not more than 6 per cent of total ash, nor more than 0.4 per cent of ash insoluble in hydrochloric acid.

(b) Koenigspaprika, king's paprika, is Hungarian paprika prepared by grinding whole pods of paprika without selection, and includes the seeds and stems naturally occurring with the pods. It contains not more than 18 per cent of nonvolatile ether extract, not more than 23 per cent of crude fiber, not more than 6.5 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid.

13. Pimenton, pimiento, Spanish paprika, is paprika having the characteristics of that grown in Spain. It contains not more than 18 per cent of nonvolatile ether extract, not more than 21 per cent of crude fiber, not more than 8.5 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid.

14. Celery seed is the dried fruit of *Celeri graveolens* (L.) Britton (*Apium graveolens* L.). It contains not more than 10 per cent of total ash, nor more than 2 per cent of ash insoluble in hydrochloric acid.

15. Cinnamon is the dried bark of cultivated varieties of *Cinnamomum zeylanicum* Nees or of *C. cassia* (L.) Blume, from which the outer layers may or may not have been removed.

16. Ceylon cinnamon is the dried inner bark of cultivated varieties of *Cinnamomum zeylanicum* Nees.

17. Saigon cinnamon, cassia, is the dried bark of cultivated varieties of *Cinnamomum cassia* (L.) Blume.

18. Ground cinnamon, ground cassia, is the powder made from cinnamon. It contains not more than 5 per cent of total ash, nor more than 2 per cent of ash insoluble in hydrochloric acid.

19. Cloves are the dried flower buds of *Caryophyllus aromaticus* L. They contain not more than 5 per cent of clove stems, not less than 15 per cent of volatile ether extract, not less than 12 per cent of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than 10 per cent of crude fiber, not more than 7 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid.

20. Coriander seed is the dried fruit of *Coriandrum sativum* L. It contains not more than 7 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

21. Cumin seed is the dried fruit of *Cuminum cyminum* L. It contains not more than 9.5 per cent of total ash, not more than 1.5 per cent of ash insoluble in hydrochloric acid, nor more than 5 per cent of harmless foreign matter.

22. Curcuma, turmeric, is the dried rhizome or bulbous root of *Curcuma longa* L.

23. Dill seed is the dried fruit of *Anethum graveolens* L. It contains not more than 10 per cent of total ash, nor more than 3 per cent of ash insoluble in hydrochloric acid.

24. Fennel seed is the dried fruit of cultivated varieties of *Foeniculum vulgare* Hill. It contains not more than 9 per cent of total ash, nor more than 2 per cent of ash insoluble in hydrochloric acid.

25. Ginger is the washed and dried, or decorticated and dried, rhizome of *Zingiber officinale* Roscoe. It contains not less than 42 per cent of starch, not more than 8 per cent of crude fiber, not more than 1 per cent of lime (CaO), not less than 12 per cent of cold-water extract, not more than 7 per cent of total ash, not more than 2 per cent of ash insoluble in hydrochloric acid, nor less than 2 per cent of ash soluble in cold water.

26. Jamaica ginger is ginger grown in Jamaica. It contains not less than 15 per cent of cold-water extract, and conforms in other respects to the standards for ginger.

27. Limed ginger, bleached ginger, is whole ginger coated with carbonate of calcium. It contains not more than 4 per cent of carbonate of calcium, nor more than 10 per cent of total ash, and conforms in other respects to the standards for ginger.

28. Horse-radish is the root of *Radicula armoracia* (L.) Robinson.

29. Prepared horse-radish is comminuted horse-radish, with or without a vinegar.

30. Mace is the dried arillus of *Myristica fragrans* Houtt. It contains not less than 20 per cent nor more than 30 per cent of nonvolatile ether extract, not more than 10 per cent of crude fiber, not more than 3 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid.

31. Macassar mace, Papua mace, is the dried arillus of *Myristica argentea* Warb.

32. Marjoram, leaf marjoram, is the dried leaves, with or without a small proportion of the flowering tops, of *Majorana hortensis* Moench. It contains not more than 16 per cent of total ash, not more than 4.5 per cent of ash insoluble in hydrochloric acid, nor more than 10 per cent of stems and harmless foreign material.

33. Mustard seed is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), *B. juncea* (L.) Cosson, or varieties or closely related species of the types of *B. nigra* and *B. juncea*.

*Sinapis alba* (white mustard) contains no appreciable amount of volatile oil. It contains not more than 5 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

*Brassica nigra* (black mustard) and *B. juncea* yield 0.6 per cent of volatile mustard oil (calculated as allylisothiocyanate and determined by the method given in Service and Regulatory Announcements, Chemistry 20). The varieties and species closely related to the types of *B. nigra* and *B. juncea* yield not less than 0.6 per cent of volatile mustard oil, similar in character and composition to the volatile oils yielded by *B. nigra* and *B. juncea*. These mustard seeds contain not more than 5 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

34. Ground mustard seed, mustard meal, is the unbolted, ground mustard seed and conforms to the standards for mustard seed.

35. Mustard cake is ground mustard seed, mustard meal, from which a portion of the fixed oil has been removed.

36. Mustard flour, ground mustard, "mustard," is the powder made from mustard seed with the hulls largely removed and with or without the removal of a portion of the fixed oil. It contains not more than 1.5 per cent of starch, nor more than 6 per cent of total ash.

37. Prepared mustard is a paste composed of a mixture of ground mustard seed and/or mustard flour and/or mustard cake, with salt, a vinegar, and with or without sugar (sucrose), spices, or other condiments. In the fat, salt, and sugar free solids it contains not more than 24 per cent of carbohydrates, not more than 12 per cent of crude fiber, nor less than 5.6 per cent of nitrogen, the carbohydrates being calculated as starch.



38. Nutmeg is the dried seed of *Myristica fragrans* Houtt., deprived of its testa, with or without a thin coating of lime (CaO). It contains not less than 25 per cent of nonvolatile ether extract, not more than 10 per cent of crude fiber, not more than 5 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid.

39. Macassar nutmeg, Papua nutmeg, male nutmeg, long nutmeg, is the dried seed of *Myristica argentea* Warb., deprived of its testa.

40. Paradise seed, grains of paradise, Guinea grains, melegueta pepper, is the seed of *Amomum melegueta* Roscoe.

41. Parsley leaves are the leaves of *Petroselinum hortense* Hoffm. (*P. sativum* Hoffm.).

42. Black pepper is the dried immature berry of *Piper nigrum* L. It contains not less than 6.75 per cent of nonvolatile ether extract, not less than 30 per cent of starch, not more than 7 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid.

43. Ground black pepper is the product made by grinding the entire berry of *Piper nigrum* L. It contains the several parts of the berry in their normal proportions.

44. Long pepper is the dried fruit of *Piper longum* L.

45. White pepper is the dried mature berry of *Piper nigrum* L. from which the outer coating or the outer and inner coatings have been removed. It contains not less than 7 per cent of nonvolatile ether extract, not less than 52 per cent of starch, not more than 5 per cent of crude fiber, not more than 3.5 per cent of total ash, nor more than 0.3 per cent of ash insoluble in hydrochloric acid.

46. Saffron is the dried stigma of *Crocus sativus* L. It contains not more than 10 per cent of yellow styles and other foreign matter, not more than 14 per cent of volatile matter when dried at 100° C., not more than 7.5 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid.

47. Sage is the dried leaf of *Salvia officinalis* L. It contains not less than 1 per cent of volatile ether extract, not more than 25 per cent of crude fiber, not more than 10 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid.

48. Savory, summer savory, is the dried leaf and flowering tops of *Satureja hortensis* L.

49. Star aniseed is the dried fruit of *Illicium verum* Hook. It contains not more than 5 per cent of total ash.

50. Tarragon is the dried leaves and flowering tops of *Artemisia dracunculus* L.

51. Thyme is the dried leaves and flowering tops of *Thymus vulgaris* L. It contains not more than 14 per cent of total ash, nor more than 4 per cent of ash insoluble in hydrochloric acid.

#### b. FLAVORING EXTRACTS

1. A flavoring extract<sup>5</sup> is a solution in ethyl alcohol of proper strength of the sapid and odorous principles derived from an aromatic plant, or parts of the plant, with or without its coloring matter, and conforms in name to the plant used in its preparation.

2. Almond extract is the flavoring extract prepared from oil of bitter almonds, free from hydrocyanic acid, and contains not less than 1 per cent by volume of oil of bitter almonds.

2a. Oil of bitter almonds, commercial, is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.), or the peach (*Amygdalus persica* L.).

3. Anise extract is the flavoring extract prepared from oil of anise, and contains not less than 3 per cent by volume of oil of anise.

3a. Oil of anise is the volatile oil obtained from the anise seed.

4. Celery seed extract is the flavoring extract prepared from celery seed or the oil of celery seed, or both, and contains not less than 0.3 per cent by volume of oil of celery seed.

4a. Oil of celery seed is the volatile oil obtained from celery seed.

<sup>5</sup> The flavoring extracts herein described are intended solely for food purposes and are not to be confounded with similar preparations described in the Pharmacopœia for medicinal purposes.



5. Cassia extract is the flavoring extract prepared from oil of cassia, and contains not less than 2 per cent by volume of oil of cassia.

5a. Oil of cassia is the lead-free volatile oil obtained from the leaves or bark of *Cinnamomum cassia* (L.) Blume, and contains not less than 80 per cent by volume of cinnamic aldehyde.

6. Cinnamon extract is the flavoring extract prepared from oil of cinnamon, and contains not less than 2 per cent by volume of oil of cinnamon.

6a. Oil of cinnamon is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Nees), and contains not less than 65 per cent by weight of cinnamic aldehyde and not more than 10 per cent by weight of eugenol.

7. Clove extract is the flavoring extract prepared from oil of cloves, and contains not less than 2 per cent by volume of oil of cloves.

7a. Oil of cloves is the lead-free volatile oil obtained from cloves.

8. Ginger extract is the flavoring extract prepared from ginger, and contains in each 100 cubic centimeters the alcohol-soluble matters from not less than 20 grams of ginger.

9. Lemon extract is the flavoring extract prepared from oil of lemon, or from lemon peel, or both, and contains not less than 5 per cent by volume of oil of lemon.

9a. Oil of lemon is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the lemon (*Citrus limonia* Osbeck), has an optical rotation (25° C.) of not less than +60° in a 100-millimeter tube, and contains not less than 4 per cent by weight of citral.

10. Terpeneless extract of lemon is the flavoring extract prepared by shaking oil of lemon with dilute alcohol, or by dissolving terpeneless oil of lemon in dilute alcohol, and contains not less than 0.2 per cent by weight of citral derived from oil of lemon.

10a. Terpeneless oil of lemon is oil of lemon from which all or nearly all of the terpenes have been removed.

11. Nutmeg extract is the flavoring extract prepared from oil of nutmeg, and contains not less than 2 per cent by volume of oil of nutmeg.

11a. Oil of nutmeg is the volatile oil obtained from nutmegs.

12. Orange extract is the flavoring extract prepared from oil of orange, or from orange peel, or both, and contains not less than 5 per cent by volume of oil of orange.

12a. Oil of orange is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the orange (*Citrus aurantium* L.), and has an optical rotation (25° C.) of not less than +95° in a 100-millimeter tube.

13. Terpeneless extract of orange is the flavoring extract prepared by shaking oil of orange with dilute alcohol, or by dissolving terpeneless oil of orange in dilute alcohol, and corresponds in flavoring strength to orange extract.

13a. Terpeneless oil of orange is oil of orange from which all or nearly all of the terpenes have been removed.

14. Peppermint extract is the flavoring extract prepared from oil of peppermint, or from peppermint, or both, and contains not less than 3 per cent by volume of oil of peppermint.

14a. Peppermint is the leaves and flowering tops of *Mentha piperita* L.

14b. Oil of peppermint is the volatile oil obtained from peppermint, and contains not less than 50 per cent by weight of menthol.

15. Rose extract is the flavoring extract prepared from attar of roses, with or without red rose petals, and contains not less than 0.4 per cent by volume of attar of roses.

15a. Attar of roses is the volatile oil obtained from the petals of *Rosa damascena* Mill., *R. centifolia* L., or *R. moschata* Herrm.

16. Savory extract is the flavoring extract prepared from oil of savory, or from savory, or both, and contains not less than 0.35 per cent by volume of oil of savory.

16a. Oil of savory is the volatile oil obtained from savory.

17. Spearmint extract is the flavoring extract prepared from oil of spearmint, or from spearmint, or both, and contains not less than 3 per cent by volume of oil of spearmint.

17a. Spearmint is the leaves and flowering tops of *Mentha spicata* L.

17b. Oil of spearmint is the volatile oil obtained from spearmint.

18. Star anise extract is the flavoring extract prepared from oil of star anise, and contains not less than 3 per cent by volume of oil of star anise.

18a. Oil of star anise is the volatile oil distilled from the fruit of the star anise (*Illicium verum* Hook.).

19. Sweet basil extract is the flavoring extract prepared from oil of sweet basil, or from sweet basil, or both, and contains not less than 0.1 per cent by volume of oil of sweet basil.

19a. Sweet basil, basil, is the leaves and tops of *Ocimum basilicum* L.

19b. Oil of sweet basil is the volatile oil obtained from basil.

20. Sweet marjoram extract, marjoram extract, is the flavoring extract prepared from the oil of marjoram, or from marjoram, or both, and contains not less than 1 per cent by volume of oil of marjoram.

20a. Oil of marjoram is the volatile oil obtained from marjoram.

21. Thyme extract is the flavoring extract prepared from oil of thyme, or from thyme, or both, and contains not less than 0.2 per cent by volume of oil of thyme.

21a. Oil of thyme is the volatile oil obtained from thyme.

22. Tonka extract is the flavoring extract prepared from tonka bean, with or without sugar or glycerin, and contains not less than 0.1 per cent by weight of coumarin extracted from the tonka bean, together with a corresponding proportion of the other soluble matters thereof.

22a. Tonka bean is the seed of *Coumarouna odorata* Aublet (*Dipteryx odorata* (Aubl.) Willd.).

23. Vanilla extract is the flavoring extract prepared from vanilla bean, with or without sugar or glycerin, and contains in 100 cubic centimeters the soluble matters from not less than 10 grams of the vanilla bean.

23a. Vanilla bean is the dried, cured fruit of *Vanilla fragrans* (Salisb.) Ames (*V. planifolia* Andr.).

24. Wintergreen extract is the flavoring extract prepared from oil of wintergreen, and contains not less than 3 per cent by volume of oil of wintergreen.

24a. Oil of wintergreen is the volatile oil distilled from the leaves of *Gaultheria procumbens* L.

Definitions and standards for ginger ale and sarsaparilla flavors are given on page 19.

#### c. EDIBLE VEGETABLE OILS AND FATS

1. Edible fats and edible oils are such glycerids of the fatty acids as are recognized to be wholesome foods. They are dry, and sweet in flavor and odor.

2. Cacao butter, cocoa butter, is the edible fat obtained from sound cacao beans (seeds of *Theobroma cacao* L. or other closely related species), either before or after roasting.

3. Coconut oil, copra oil, is the edible oil obtained from the kernels of the coconut (*Cocos nucifera* L. or *C. butyracea* L.).

4. Cochin oil is coconut oil prepared in Cochin (Malabar).

5. Ceylon oil is coconut oil prepared in Ceylon.

6. Corn oil, maize oil, is the edible oil obtained from the germ of Indian corn, maize (*Zea mays* L.).

7. Cottonseed oil is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum* L.), or from the seed of other species of *Gossypium*.

8. Olive oil, sweet oil, is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea* L.).

9. Palm kernel oil is the edible oil obtained from the kernels of the fruit of the palm tree (*Elaeis guineensis* Jacq., or *E. melanococca* Gaert.).

10. Peanut oil, arachis oil, earthnut oil, is the edible oil obtained from the peanut (*Arachis hypogaea* L.).

11. Poppy seed oil is the edible oil obtained from the seeds of the poppy (*Papaver somniferum* L.).

12. Rapeseed oil, rape oil, colza oil, is the edible oil obtained from the seed of the rape plant (*Brassica napus* L.), or from the seed of closely related Brassica species which yield oils similar in composition and character to the oil obtained from the seed of *B. napus* L.

13. Soy-bean oil, soy oil, soja oil, is the edible oil obtained from the seed of the soy-bean plant (*Soja max.* (L.) Piper; *Glycine soja* Sieb. & Zucc.; *Soja hispida* Moench).

14. Sesame oil, gingilli oil, teel oil, benne oil, is the edible oil obtained from the seed of the sesame plant (*Sesamum orientale* L.; *S. indicum* L.; *S. radiatum* Schum. and Thonn.).

15. Sunflower oil is the edible oil obtained from the seed of the sunflower (*Helianthus annuus* L.).



## E. TEA, COFFEE, AND CACAO PRODUCTS

### a. TEA

1. Tea is the leaves and leaf buds of different species of *Thea*, prepared by the usual trade processes of fermenting, drying, and firing, meets the provisions of the act of Congress approved March 2, 1897, and the regulations made in conformity therewith (U. S. Department of Agriculture Miscellaneous Circular 9, August, 1923), conforms in variety and place of production to the name it bears, and contains not less than 4 per cent nor more than 7 per cent of ash.

### b. COFFEE

1. Coffee is the seed of *Coffea arabica* L. or *C. liberica* Hiern, freed from all but a small portion of its spermoderm, and conforms in variety and place of production to the name it bears.

2. Roasted coffee is coffee which by the action of heat has become brown and developed its characteristic aroma, and contains not less than 10 per cent of fat and not less than 3 per cent of ash.

### c. CACAO PRODUCTS

1. Cacao beans, cocoa beans, are the seeds of trees belonging to the genus *Theobroma*, especially those of *Theobroma cacao* L., and closely related species.

2. Cacao nibs, cocoa nibs, "cracked cocoa," are roasted or dried cacao beans, broken and freed from germ and from shell or husk.

3. Chocolate, plain chocolate, bitter chocolate, chocolate liquor, chocolate paste, bitter chocolate coating, is the solid or plastic mass obtained by grinding cacao nibs, and contains not less than 50 per cent of cacao fat and, on the moisture and fat free basis, not more than 8 per cent of total ash, not more than 0.4 per cent of ash insoluble in hydrochloric acid, and not more than 7 per cent of crude fiber.

4. Sweet chocolate, sweet chocolate coating, is chocolate mixed with sugar (sucrose), with or without the addition of cacao butter, spices, or other flavoring materials, and contains, on the moisture, sugar, and fat free basis, no greater percentage of total ash, ash insoluble in hydrochloric acid, or crude fiber, respectively, than is found in moisture and fat free chocolate.

5. Milk chocolate, sweet milk chocolate, is the product obtained by grinding chocolate with sugar, with the solids of whole milk, or the constituents of milk solids in proportions normal for whole milk, and with or without cacao butter and/or flavoring material. It contains not less than 12 per cent of milk solids.

6. Cocoa, powdered cocoa, is chocolate deprived of a portion of its fat and pulverized, and contains, on the moisture and fat free basis, no greater percentage of total ash, ash insoluble in hydrochloric acid, or crude fiber, respectively, than is found in moisture and fat free chocolate.

7. "Breakfast cocoa" is cocoa which contains not less than 22 per cent of cacao fat.

8. Sweet cocoa, sweetened cocoa, is cocoa mixed with sugar (sucrose), and contains not more than 65 per cent of sugar in the finished product, and, on the moisture, sugar, and fat free basis, no greater percentage of total ash, ash insoluble in hydrochloric acid, or crude fiber, respectively, than is found in moisture and fat free chocolate.

9. Sweet milk cocoa is the product obtained by grinding cocoa with sugar, with the solids of whole milk, or the constituents of milk solids in proportions normal for whole milk, and with or without flavoring material. It contains not less than 12 per cent of milk solids.

10. Dutch-process chocolate, "alkalized chocolate," and Dutch-process cocoa, "alkalized cocoa," are modifications, respectively, of chocolate and cocoa, in that in their manufacture an alkali carbonate, or other suitable alkaline substance, has been employed. In the preparation of these products not more than 3 parts by weight of potassium carbonate, or the neutralizing equivalent thereof in other alkaline substance, are added to each 100 parts by weight of cacao nibs. The finished products conform to the standards for chocolate and cocoa, respectively, due allowance being made for the kind and amount of alkaline substance added.



## F. BEVERAGES

### a. FRUIT JUICES

(Schedule to be prepared.)

### b. CARBONATED BEVERAGES AND BEVERAGE FLAVORS

1. Ginger ale is the carbonated beverage prepared from ginger ale flavor, sugar (sucrose) sirup, harmless organic acid, potable water, and caramel color.

1a. Ginger ale flavor, ginger ale concentrate, is the flavoring product in which ginger is the essential constituent, with or without aromatic and pungent ingredients, citrus oils, and fruit juices.

2. Sarsaparilla is the carbonated or artificially carbonated beverage prepared with potable water, sugar (sucrose) sirup, and sarsaparilla flavor. It may or may not be acidulated.

2a. Sarsaparilla flavor is the water-soluble product prepared with oil of sassafras and methyl salicylate or oil of wintergreen or oil of sweet birch and with or without other essential oils or extract of sarsaparilla.

## G. WINES

1. Wine is the product made by the normal alcoholic fermentation of the juice of sound, ripe grapes, and the usual cellar treatment, and contains not less than 7 per cent nor more than 16 per cent of alcohol, by volume, and, in 100 cubic centimeters (20° C.), not more than 0.1 gram of sodium chloride nor more than 0.2 gram of potassium sulphate; and for red wine not more than 0.14 gram, and for white wine not more than 0.12 gram of volatile acids produced by fermentation and calculated as acetic acid. Red wine is wine containing the red coloring matter of the skins of grapes. White wine is wine made from white grapes or the expressed fresh juice of other grapes.

2. Dry wine is wine in which the fermentation of the sugars is practically complete, and which contains, in 100 cubic centimeters (20° C.), less than 1 gram of sugars and for dry red wine not less than 0.16 gram of grape ash and not less than 1.6 grams of sugar-free grape solids, and for dry white wine not less than 0.13 gram of grape ash and not less than 1.4 grams of sugar-free grape solids.

3. Fortified dry wine is dry wine to which brandy has been added but which conforms in all other particulars to the standard of dry wine.

4. Sweet wine is wine in which the alcoholic fermentation has been arrested, and which contains, in 100 cubic centimeters (20° C.), not less than 1 gram of sugar, and for sweet red wine not less than 0.16 gram of grape ash, and for sweet white wine not less than 0.13 gram of grape ash.

5. Fortified sweet wine is sweet wine to which wine spirits have been added. By act of Congress, "sweet wine" used for making fortified sweet wine and "wine spirits" used for such fortification are defined as follows (sec. 43, act of October 1, 1890, 26 Stat., 567, as amended by section 68, act of August 27, 1894, 28 Stat., 509, and further amended by act of Congress approved June 7, 1906): "That the wine spirits mentioned in section 42 of this act is the product resulting from the distillation of fermented grape juice to which water may have been added prior to, during, or after fermentation, for the sole purpose of facilitating the fermentation and economical distillation thereof, and shall be held to include the products from grapes or their residues, commonly known as grape brandy; and the pure sweet wine, which may be fortified free of tax, as provided in said section, is fermented grape juice only, and shall contain no other substance whatever introduced before, at the time of, or after fermentation, except as herein expressly provided; and such sweet wine shall contain not less than four per centum of saccharine matter, which saccharine strength may be determined by testing with Balling's saccharometer or must scale, such sweet wine, after the evaporation of the spirits contained therein, and restoring the sample tested to original volume by addition of water: *Provided*, That the addition of pure boiled or condensed grape must or pure crystallized cane or beet sugar or pure anhydrous sugar to the pure grape juice aforesaid, or the fermented product of such grape juice prior to the fortification provided by this act for the sole purpose of perfecting sweet wine according to commercial standard, or the addition of water in such quantities only as may be necessary in the mechanical operation of grape conveyors, crushers, and pipes leading to fermenting tanks, shall not be excluded by the definition of pure sweet wine aforesaid: *Provided, however*, That the cane or beet sugar,

or pure anhydrous sugar, or water, so used shall not in either case be in excess of ten (10) per centum of the weight of the wine to be fortified under this act: *And provided further*, That the addition of water herein authorized shall be under such regulations and limitations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe; but in no case shall such wines to which water has been added be eligible for fortification under the provisions of this act where the same, after fermentation and before fortification, have an alcoholic strength of less than five per centum of their volume."

6. Sparkling wine is wine in which the after part of the fermentation is completed in the bottle, the sediment being disgorged and its place supplied by wine or sugar liquor, and which contains, in 100 cubic centimeters (20° C.), not less than 0.12 gram of grape ash.

7. Modified wine, ameliorated wine, corrected wine, is the product made by the alcoholic fermentation, with the usual cellar treatment, of a mixture of the juice of sound, ripe grapes with sugar (sucrose), or a sirup containing not less than 65 per cent of sugar (sucrose), and in quantity not more than enough to raise the alcoholic strength after fermentation to 11 per cent by volume.

### H. VINEGAR

1. Vinegar, cider vinegar, apple vinegar, is the product made by the alcoholic and subsequent acetous fermentations of the juice of apples, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

2. Wine vinegar, grape vinegar, is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

3. Malt vinegar is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

4. Sugar vinegar is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, sirup, molasses, or refiners' sirup, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

5. Glucose vinegar is the product made by the alcoholic and subsequent acetous fermentations of solutions of starch sugar or glucose, is dextrorotatory, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

6. Spirit vinegar, distilled vinegar, grain vinegar, is the product made by the acetous fermentation of dilute distilled alcohol, and contains, in 100 cubic centimeters (20° C.), not less than 4 grams of acetic acid.

### III. SALT

1. Table salt, dairy salt, is fine-grained crystalline salt containing, on a water-free basis, not more than 1.4 per cent of calcium sulphate ( $\text{CaSO}_4$ ), not more than 0.5 per cent of calcium and magnesium chlorides ( $\text{CaCl}_2$  and  $\text{MgCl}_2$ ), nor more than 0.1 per cent of matters insoluble in water.

Pending further announcement, no exception will be taken by the Food, Drug, and Insecticide Administration to table salt that meets the requirements of the standard except that it contains anhydrous calcium sulphate (anhydrite) in excess of 0.1 per cent, provided that the total calcium sulphate content does not exceed 1.4 per cent.

### IV. BAKING POWDER

Baking powder is the leavening agent produced by the mixing of an acid-reacting material and sodium bicarbonate, with or without starch or flour.

It yields not less than 12 per cent of available carbon dioxide.

The acid-reacting materials in baking powder are: (1) Tartaric acid or its acid salts, (2) acid salts of phosphoric acid, (3) compounds of aluminum, or (4) any combination in substantial proportions of the foregoing.